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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,615	11/20/2003	Tsuyoshi Ebuchi	60188-713	6358

7590 09/20/2005

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EXAMINER
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CHO, JAMES HYONCHOL

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/716,615

Applicant(s)

EBUCHI ET AL.

Examiner

James Cho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6-9,12 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 5 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

Applicant's election of Group I (claims 1, 3, 5, 10, 11 and 13) in the reply filed on July 5, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the power-down operation recited in claim 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Pradhan (US PAT No. 6,781,456).

Regarding claim 1, Fig. 3 of Pradhan teaches a receiver circuit for receiving a receive signal (INP, INM) that undergoes a given number or more transitions in a given time (frequency of the signal), comprising; a processing unit (310) for processing the receive signal; and a signal detection unit (304, 308) that accepts said receive signal, includes a transition number detection circuit (308) for detecting a number of transitions of a signal (detects frequency, i.e. the number of transition per second) obtained based on the receive signal and outputs a signal (AND) for controlling an operation of the processing unit when the number of transitions detected by the transition number detection circuit is

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not more than a set value (when frequency is less than 200 MHz, the Fail Safe is activated; col. 5, lines 19-50).

Regarding claim 3, Fig. 3 of Pradhan teaches the receiver circuit of claim 1 wherein the receive signal is a data signal or a clock signal (intended use of a differential circuit of Fig. 3 is a data signal or a clock signal).

Regarding claim 10, Fig. 3 of Pradhan teaches the receiver circuit of claim 1 further comprising an offset buffer (306 in Fig. 4) that accepts the receive signal (INP, INM) and outputs a HIGH or LOW signal when amplitude of said receive signal is not more than a set value (col. 4, lines 32-52), wherein the HIGH or LOW signal output by the offset buffer is input to the transition number detection circuit as the signal obtained based on the receive signal (output signal, xor, of 306 is coupled to 310).

Regarding claim 11, Fig. 3 of Pradhan teaches the receiver circuit of claim 1, where the processing unit is a data processing unit (processes data from 306, 308) for processing a data signal received as the receive signal and is reset (initialized, i.e. reset when the receiver is just enabled; col. 5, lines 51-62) in accordance with the signal output by the signal detection unit.

***Allowable Subject Matter***

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Claims 5 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Although Pradhan teaches a failsafe differential amplifier circuit, one of ordinary skill in the art would not have been motivated to modify the teaching of Pradhan to further includes, among other things, the specific of the received signal being a data signal and a clock signal received through a cable in which a plurality of transfer paths are integrated (claim 5), and the processing unit being power-down operated according to the signal output by the signal detection unit (claim 13).

#### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rinaldi (US PAT No. 4,446,437) discloses a pulse monitor circuit.

Blow et al. (US PAT No. 5,301,171) discloses a cross-monitored pair of clocks for processor failsafe operation.

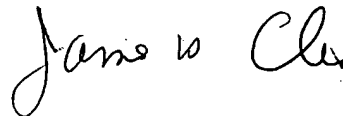
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Cho whose telephone number is 571-272-1802. The examiner can normally be reached on M-F 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Tokar can be reached on 571-272-1812. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James H. Cho  
Primary Examiner  
Art Unit 2819

JC